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10/715,425	11/19/2003	Jerome Cornet	ALC 3097	5332

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Kramer & Amado, P.C.  
1725 Duke Street  
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EXAMINER
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BIAGINI, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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2442

NOTIFICATION DATE	DELIVERY MODE
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11/12/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

**Application No.**

10/715,425

**Applicant(s)**

CORNET ET AL.

**Examiner**

Christopher Biagini

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____.                                     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                         |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments regarding the rejections of claims 1-8 under 35 USC 103(a) have been fully considered but are not persuasive.

At the outset, the examiner wishes to note that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Regarding the argument that the combination does not teach or suggest "trusted" customers of a network provider, the Examiner respectfully disagrees. The concept of "trust" is extraordinarily broad. First, any customer of a network provider is "trusted" in some way. For example, the network provider must have some degree of trust in the customer in order to engage in a business transaction with that customer, such as the providing of network service. Second, Fraser describes customers that are so trusted that they are allowed to specify policies (see col. 16, lines 1-10).

Regarding the argument that the combination does not teach or suggest “the document referencing a location of a corresponding schema” because the references “rely upon storage of schemas in central or generally available locations,” the Examiner respectfully disagrees. Even assuming, *arguendo*, that the combination somehow requires the schemas to be stored in a particular location, it is unclear how a document referencing that location somehow precludes it from being “central” or “generally available.”

Regarding the various arguments that the references “teaches away” from the invention, the Examiner respectfully disagrees. The references do not criticize, discredit, or otherwise discourage the solution claimed. For example, it is unclear how Abjanic’s mere “use of an XML director” criticizes, discredits, or otherwise discourages “fetching a schema containing routing rules.” Similarly, it is unclear how Horvitz, by “provid[ing] a central point of administration for all devices associated with a person,” criticizes, discredits, or otherwise discourages “having default and particular routing rules selected by checking or matching values of particular elements in schemas and documents.”

Regarding the argument that the disclosure of Fraser “is not equivalent to...having a content switch send packets to either particular or default servers,” the Examiner respectfully submits that Fraser was not relied upon to teach this feature.

Regarding the argument that Schwarzhoff’s polymorphic schemas somehow “teach away” from the claimed invention, the Examiner respectfully disagrees. Applicant provides almost no reasoning for why this might be the case, save for an assertion that the schemas in Schwarzhoff are polymorphic, “generally available,” and uniquely named. It is unclear how these properties could possibly criticize, discredit, or otherwise discourage the claimed invention.

Finally, regarding the argument that the default action taught by the Java tutorial “is not akin” to the claimed default action because the claimed default action is not related to entry of calendar data, the Examiner respectfully submits that one of ordinary skill in the art would have recognized that the tutorial is using the calendar data as an *example*, and that the teachings of the Java tutorial are broadly applicable to computer systems in general.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abjanic et al. (US Pub. No. 2003/0028654, hereinafter “Abjanic”) in view of Horvitz (US Pub. No. 2003/0097495), and further in view of Fraser et al. (US Patent No. 6,629,149, hereinafter “Fraser”), Schwarzhoff et al. (US Patent 6,591,260, hereinafter “Schwarzhoff”), and “The Java Tutorial: The switch Statement,” hereinafter “the Java Tutorial.”

Regarding claim 1, note that the preamble has been given patentable weight as it is relied upon by the body of the claim.

Abjanic shows a content switch (director 145) that routes packets (comprising packets of XML data: see [0055]-[0056]) associated with a document (comprising an XML document: see

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[0057]) to one of a plurality of application providers (application servers: see [0029] and [0077]) in a computer based communication system using instructions recorded on a computer-readable storage medium (see [0031]), the storage medium comprising:

- instructions in the content switch that send the document to a parser (comprising the parsing system which includes XML parser 312: see [0059]);
- instructions in the parser that fetch a routing document (comprising a group of configuration patterns: see [0059]-[0061]), wherein the fetched document comprises:
  - a plurality of elements (comprising XML tags), wherein a particular element in the fetched document is also found in the sent document (for example, the "PurchaseAmount" and "To" elements, see [0042]-[0043] [0049]-[0053]) ,
  - a particular routing rule (comprising a configuration pattern: see [0052] and [0061]);) that redirects the packets to a particular server when a value of the particular element matches a predefined value of the particular element in the fetched document (for example, redirecting a message to server S1 if the value of the "To" element matches the value "bookstore.com": see [0049]-[0050]), and
- instructions that pass the document to a routing instruction processor (content based switching decision logic: see [0059] and [0083]);

- instructions that interpret the routing rules in the routing document (content based switching logic 316: see [0059]), wherein the content switch executes the routing rules (see [0059] and Fig. 3),
- instructions that use the interpreted routing rules to redirect the packets to a specified server (output interface 320: see [0060]) or a default server (see [0048]).

Abjanic further shows that there is a default action which redirects the packets to a default server when the value of a particular element in the sent document does not match the predefined value of the particular element in the fetched schema (see [0048]), but does not show that this default action is provided in the routing rules. In other words, the default action in Abjanic may be defined "at the factory" and not by the same configuration information that defines the routing rules.

Additionally, Abjanic does not explicitly show:

- that each application provider is a trusted customer of a network provider;
- that the document references a location of a corresponding schema, which is then fetched from that location;
- that the document is validated according to the fetched schema;
- that the schema contains the routing rules and elements;
- that the default routing rule is in the schema document;
- that the content switch is managed by a network provider;

Schwarzhoff shows a document referencing a location of a corresponding schema, which is then fetched from that location and used to validate the document (see col. 4, lines 23-60; col. 6, lines 20-30; and col. 9, lines 1-9). It would have been obvious to modify the system of Abjanic

to fetch schemas and validate documents as taught by Schwarzhoff in order to ensure that the documents conform to the expected format.

Horvitz shows a schema document associated with a packet and containing routing rules (see [0159]-[0161]). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Abjanic with the schema document of Horvitz in order to provide routing “hints” to a downstream network element (see Horvitz, [0161]) and reduce the total number of individual documents which must be maintained by users of the system.

The Java tutorial shows defining a default action using the same mechanism as that used to define actions for specific situations (comprising a *default* statement: see page 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Abjanic to include a default action in the routing rules in order to allow users of the system more flexibility in choosing what that default action should be.

Fraser shows that entities can be trusted customers (comprising customers who are trusted insofar as they are allowed to specify policies which are used as routing criteria) of a network provider (comprising the provider which provides WAN connectivity to a LAN), and that network providers can manage routing devices (comprising an inline agent). See col. 15, line 45 to col. 16, line 10. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Abjanic with the trust and management taught by Fraser in order to distribute the administrative responsibilities for the system between multiple organizations.



Regarding claim 2, the combination shows the limitations of claim 1 as applied above, and Abjanic further shows instructions that parse XML-based language (see [0028]).

Regarding claim 9, the combination shows the limitations of claim 1 as applied above, and further shows wherein:

- the fetched schema (note that the combination provides for the routing rules to be contained in a schema, as described above) comprises a plurality of particular routing rules and a plurality of predefined values of the particular element in the fetched schema (see [0049] of Abjanic, and note that the various routing rules all relate to the same particular element, the “To” element),
- each of the particular routing rules redirects the packets to a different server (for example, servers S1, S2, and S3), and
- each of the particular routing rules corresponds uniquely to one of the predefined values (for example, "bookstore.com", "stockquote.com", "computerstore.com").

Claims 3-7 and 10-12 correspond to claims 1, 2, and 9 and are rejected for the same reasons as given above.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fallside ("XML Schema Part 0: Primer") discusses the features of the XML Schema

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language, including inserting references to schemas in instance documents (see section 5.6, “schemaLocation”).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Biagini whose telephone number is (571) 272-9743. The examiner can normally be reached on weekdays from 8:30 AM to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Salah Najjar, can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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